

What is claimed is:

1. A radio multi-channel data communicating system comprising:

5 a file divider for dividing a file size of data to be transmitted into a number of available channels;

a plurality of first data converters for converting respective data in order to transmit the file divided by the file divider via a plurality of radio communication
10 channels;

a plurality of data transmitters for transmitting data respectively converted by the plurality of the first data converters via a radio communication network;

a plurality of data receivers for receiving data
15 transmitted from the plurality of the data transmitters via the radio communication network;

a plurality of second data converters for converting data respectively received by the plurality of the data receivers; and

20 a file synthesizer for synthesizing the divided files respectively converted by the plurality of the second data converters.

2. The radio multi-channel data communicating system
25 of claim 1, wherein said data transmitter and said data receiver comprise a plurality of mobile phone terminals which transmit and receive data, respectively.

3. The radio multi-channel data communicating system of claim 1, further comprising a plurality of radio reserve channels to replace respective inferior communication channels when communication inferiorities occur in the plurality of radio communication channels.

4. The radio multi-channel data communicating system of claim 1, wherein said file divider and said file synthesizer are realized by software by using a general computer.

5. A radio multi-channel data communicating method for transmitting and receiving data using a radio multi-channel, the radio multi-channel data communicating method comprising the steps of:

(a) dividing a file size of data to be transmitted into a number of available channels;

(b) converting a number of the divided files of step (a) into a data format for transmitting the converted result via respective mobile phone terminals;

(c) receiving data transmitted from step (b) via the respective mobile phone terminals and converting the received data into an original data file format; and

(d) synthesizing the divided files respectively converted in step (c) into an original single file.

6. The radio multi-channel data communicating method of claim 5, wherein said divided file comprises a file structure portion representing an attribute of the file and a file data portion including data.

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7. The radio multi-channel data communicating method of claim 5, wherein said file structure portion comprises a file name and a file size of an original file, and contents of a sequence of the divided file.

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8. An image data transmitting system in which multimedia data requiring a real time reproduction is transmitted and reproduced, the image data transmitting system comprising:

15 a radio multi-channel data communicating system for dividing a data file desired to be transmitted into a number of files, transmitting the divided files via a plurality of radio communication channels, receiving the transmitted files and synthesizing the received files into an original
20 file;

a vehicle state detector for detecting a running state of the moving vehicle and outputting the detected result;

a data processor for receiving a data file received via the radio multi-channel data communicating system and
25 the result output from the vehicle state detector, and converting the received data file and detected result into an image signal and outputting the converted image signal;

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and

a plurality of displays for displaying data output from the data processor mounted on respective rooms of the moving vehicle.

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9. The image data transmitting system of claim 8, further comprising a character generator for overlaying characters indicating a guiding message into a video signal output from the data processor and outputting the overlaid result.

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10. The image data transmitting system of claim 8, wherein said character generator selectively performs any one of a function of overlaying a character message onto the video signal output from the data processor and outputting the overlaid result and a function of interrupting the video signal and outputting only a character message.

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11. The image data transmitting system of claim 8, further comprising: a modulator for modulating the video signal output from the data processor into a RF video signal; and a video signal distributor for distributing the signal output from the modulator to a plurality of displays.

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12. The image data transmitting system of claim 8, wherein said data processor further comprises a storage

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medium for storing the data received via the radio multi-channel data communicating system.

13. The image data transmitting system of claim 8,
5 wherein said data processor outputs the data received and synthesized via the radio multi-channel data communicating system before storing the synthesized data in the storage medium, to thereby enhance a real-time processing capability.

10 14. The image data transmitting system of claim 12, wherein said data processor outputs the data received and synthesized via the radio multi-channel data communicating system before storing the synthesized data in the storage
15 medium, to thereby enhance a real-time processing capability.

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